Fatio, V. 1899. Faune des Vertébrés de la Suisse. Vol. 2. Genf und Basel. Fischer, W. 1963. Die Geier. Neue Brehm-Bucherei, Wittenberg.

Addresses: Dr David C. Houston, Zoology Department, Glasgow University, Glasgow G12 8QQ, Scotland. Dr Allan Hall, Geology and Applied Geology Department, Glasgow University, Glasgow G12 8QQ, Scotland. Dr Hans Frey, Zoology and Parasitology Department, Veterinary University, A-1030, Vienna, Austria.

© British Ornithologists' Club 1993

## IN BRIEF

## MAGGOTS IN THE DIET OF THE COLLARED DOVE

Columbids in general are granivorous. Small snails are, however, regularly eaten during the breeding season as a source of calcium (e.g. Murton *et al.* 1964; *Ibis* 106: 174–188), and several genera, including *Streptopelia*, have been recorded eating other invertebrates (Goodwin 1970, *Pigeons and Doves of the World*). I report here the consumption of

maggots by Collared Doves Streptopelia decaocto.

While studying the ecology of the Collared Dove near Ludhiana, I collected 206 birds for analysis of their gut contents, 10-20 in each month. None of the birds collected in 11 months of the year contained any insects. In July, however, 2 out of 16 (collected on 19 and 31 July 1985) had their crops full of maggots which were visible through the transparent skin of the crop. In one of them about 25% of the maggots were alive, and started moving about as soon as the crop was opened; they were alive probably because the bird was dissected immediately after being shot during the doves' peak feeding period (07.00-09.00 hrs). In the gizzards of both birds there were semi-digested maggots, their bodies hollow with the cuticle intact. Other food items present in small amounts in the guts of these doves were maize (1.09% by weight), wheat (0.29%), weed seeds (0.72%) and grit (5.80%); maggots formed the remaining 92.1%. Both birds were adult males in normal healthy condition, with no wounds or infections which might have accounted for the maggots. Collared Doves were often seen probing organic manure added to the fields, and also cattle dung kept in manure pits, and it is probable that the maggots were obtained in this way. In other doves whose gut contents were analysed, grain recovered from the crops sometimes had bits of dung attached.

The food of Collared Doves in this area (Saini & Toor 1994, in Granivorous Birds in Polluted Environments; PWN, Warsaw) is composed of seeds of cultivated and wild plants (85%) and grit (15%). Animal matter, especially snail shells, forms only <1% of total food. The recorded unusual intake of animal matter in the diet in July coincides with the period of food scarcity for doves. In my study area, there are two main crop seasons, viz. rabi (November–December to March–April) and kharif (June–July to October–November). Major kharif crops (rice, maize and pulses) are sown by the end of June and after sprouting become unavailable to doves. Saini & Toor (loc. cit.) reported that weed seeds formed the main part (53%) of the diet of

doves in July, and attributed it to the unavailability of other crop seeds in this area.

I am grateful to the Indian Council of Agricultural Research for financial assistance, and to Drs M. S. Dhindsa and M. S. Saini for commenting on the manuscript

Department of Zoology, Punjab Agricultural University, Ludhiana—141 004, India. HARJEET KAUR SAINI

22 September 1992

## **BOOKS RECEIVED**

World Conservation Monitoring Centre. 1993. World Checklist of Threatened Birds. Pp. xiii+308. Joint Nature Conservation Committee, Peterborough (available from Natural History Book Service Ltd., 2 Wills Road, Totnes, Devon TQ9 5XN). ISBN 1-873701-45-4. £26. 30 × 21 cm.

This is the 3rd edition of one in a series of volumes (the others cover other animal groups) prepared for the U.K.'s Scientific Authority for Animals to assist in implementing the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). For each species the range (breeding, non-breeding and vagrant) is given, its "threat category" (endangered, vulnerable, insufficiently known, etc.), and key references (by number, referring to a numbered list of 1559 references which itself constitutes a useful compilation of recent literature).

Sibley, C. G. & Monroe, B. L., Jr. 1993. A Supplement to Distribution and Taxonomy of Birds of the World. Pp. vi+108. Yale University Press. ISBN 0-300-05549-8. £19.95. 29 × 22 cm.

After publication of their monumental Distribution and Taxonomy . . . (for review, see vol. 111: 110–112), the authors requested suggestions for improvement or correction. The response was "extensive and gratifying"; the present supplement is the result. It is in two parts: a short section (13 pages) containing changes in systematics that affect classification or scientific names, and the main section containing a variety of other changes to the text. Apart from some name changes for higher categories, the changes affect lower taxonomic levels, mainly species and superspecies; the still controversial revolutionary classification, based on DNA–DNA hybridization, is unchanged. Anyone owning the main work should have this supplement, which is of the same design and general format, but soft-covered.

Monroe, B. L., Jr. & Sibley, C. G. 1993. A World Checklist of Birds. Pp. xix+393. Yale University Press. ISBN 0-300-05547-1. £35. 26 × 18 cm.

A species-level checklist, based on the classification set out in the Sibley & Monroe Distribution and Taxonomy of Birds of the World and its supplement (see above). There is a line for each species, giving scientific and English name, a very brief statement of range, and a space for the reader's note(s). Taxa not admitted by the authors as species but considered so by others, i.e. borderline cases, are listed under the relevant species heading. There are two indexes, totalling 57 pages, of generic and English names. This is probably the most complete avian species list of handy size that makes some (limited) allowance for MS notes and additions according to the user's needs.